

REMARKS

Status of the Claims

Claims 1-5, 7 and 10-26 are now present in this application. Claims 1, 10 and 25 are independent.

By this Amendment, claims 1 and 18-25 are amended, and claim 26 is added. No new matter is involved.

Applicants respectfully submit that support for the amendments to independent claims 1 and 25 to the effect that the resilient membrane forms the inlet port and the outlet port is found, for example, on page 13, second full paragraph, which states that “[T]he resilient membrane 7 is formed of a thin film in a sack shape (bag shape) having a distal end 9a formed in a substantially semispherical shape, a body portion (middle portion) 9b in a cylindrical shape, a proximal end defining an opening 9c as an intake port (9c) for contents, and a circular flange 11 formed on the outer peripheral edge of the opening 9c. The resilient membrane 7 is attached to the container opening 2 so as to cover the discharge port 5 of the container body 3.”

Amendments to claims 1 and 21 to the effect that the plug member is retained by the resilient membrane between the intake port and the outlet port in the flow path, is found, for example, on page 15, lines 9-19 of the description in the specification as filed, to wit, “The plug member 8 has a diameter larger than an inner diameter of the body portion 9b of the resilient membrane 7.” Therefore, when the plug member 8 is provided in the body portion 9b of the resilient membrane 7, the plug member 8 comes into tight contact with an inner surface of the resilient membrane 7, and the body portion 9b of the resilient membrane 7 which comes into contact with the plug member 8 is resiliently deformed so as to expand outwardly. The plug member 8 is held by the resilient force generated by resilient deformation of the resilient membrane 7, thereby being retained within the resilient membrane 7.”

Applicants also respectfully note that the plug member is always retained within the resilient membrane and there is nothing else needed to retain the plug member as shown from the description in the specification and drawings.

Applicants respectfully submit that support for the amendments to independent claims 1 and 25 to the effect that, “the clearance forming means form a clearance between the outlet ~~port and~~ port and the plug member,” is supported, for example, (1) on page 16, lines 19-24 of the

description in the specification as filed, to wit, “The resilient membrane 7 is provided with a projection clearance forming projection) for locking and positioning the plug member 8 on an inner surface of the distal end 9a at a position near the outlet port 6, and the projection serves as clearance forming means 13 for forming a clearance between the outlet port 6 and the plug member 8;” and (2) on page 17, lines 6-10 of the description in the specification as filed, to wit, “Therefore, the plug member 8 locked by the clearance forming means 13 in the shape of the projection is positioned apart from the outlet port 6 so that a clearance 14 is formed between the plug member 8 and the outlet port 6,” and (3) from page 22, line 19 to page 23, line 2 of the description in the specification as filed, to wit, “A third embodiment shown in Fig. 6 is different from the second embodiment in that a recess for forming a clearance between the outlet port 6 and the plug member 8 is provided in the resilient membrane 7 instead of the projecting clearance forming means 13 provided on the plug member 8 in the second embodiment, and the recess serves as the clearance forming means 13.”

Applicants also respectfully submit that the language in amended claims 1 and 25 to the effect that “the resilient membrane is expanded and deformed in a direction away from the plug member by a fluid pressure applied from the intake port,” is supported in claim 2 and from page 19, line 21 to page 20, line 4 of the description in the specification as filed, to wit, “The contents push the resilient membrane 7 in the tight-contact state so as to resiliently and expansively deform the resilient membrane 7 outward, thereby releasing the sealed portion between the spherical sealing surface 12 and the resilient membrane 7, and entering into the clearance 14 on the side of the outlet port 6. The clearance 14 is finally filled with the contents, and the contents press the discharging port 6 in the discharging direction to be discharged toward the outside.”

Reconsideration of this application, as amended, is respectfully requested.

Priority Under 35 U.S.C. § 119

Applicants thank the Examiner for acknowledging Applicants' claim for foreign priority under 35 U.S.C. § 119, and receipt of the certified priority document.

Drawings

Because no objection has been received, Applicants assume that the drawings are acceptable and that no further action is necessary. Confirmation thereof in the next Office Action is respectfully requested.

Telephone Interview

Applicants acknowledge with appreciation the courtesies extended by Examiner Nicolas during a telephone interview conducted on December 13, 2010, during which Examiner Nicolas explained that when the outstanding Office Action stated that Gerber discloses a backflow preventing plug as seen in Figures 1C, which comprises a thin film membrane (8) defining a flow path having an intake port and an outlet port, that the flow path intake port is Gerber's inlet port 4, and the flow path outlet port is Gerber's outlet port 6.

Rejection Under 35 U.S.C. § 102

Claims 1-5, 7, 10-17 and 25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Gerber, U.S. 6,286,725 ("Gerber"). This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

Applicants respectfully submit that claims 1 and 25, as amended, patentably define over Gerber for a number of reasons. Claims 1 and 25 recite combinations of features including, for example, a backflow preventing plug including a thin film resilient membrane defining a flow path and forming an intake port and an outlet port of the flow path, the flow path being defined as the intake port to the plug and the outlet port from the plug, and also the flow path being defined between the intake port and the outlet port.

The Office Action indicates that Gerber discloses a thin film resilient membrane (8) defining a flow path having an intake port and an outlet port. Indeed, it appears that Gerber discloses the thin film resilient membrane (8) having an outlet port 6 because there is a description as follows: an upper portion 8 of the housing is made of an elastomeric sheath and forms a one-way outlet valve 10.

However, reference to Gerber's Figs. 1A-1C show that Gerber's inlet port is formed by a lower housing body 12 made of a rigid material. A rigid material is clearly not a thin film resilient membrane, as claimed. Applicants respectfully submit that the only port formed by Gerber's elastomeric sheath 8 is its one way outlet port 6. Clearly Gerber's elastomeric sheath does not form both an inlet port and a separately recited outlet port, where the flow path is defined between the input port and the outlet port, as claimed.

Further, claims 1 and 25 also recite a ball-shaped plug member retained between the intake port and the outlet port in the flow path in the resilient membrane, whereas in Figs. 1A-1C of Gerber, a valve plug 2 is not retained in Gerber's elastomeric sheath 8, which merely forms a blocking restriction against which valve plug 2 is forced instead of actually retaining valve plug 2 therein. Thus, claims 1 and 25 differ from Gerber's valve 1 shown in Figs. 1A-1C. Please refer to attached "sheet 1," in this regard, which shows Figs. 1A, 1B and 1C of Gerber with legends added by Applicants.

Further, in this regard, Applicants note that Gerber's thin film resilient membrane (8) clearly does not form an intake port 4, and therefore Gerber does not disclose "A thin film resilient membrane defining a flow path and forming an intake port and an outlet port" as recited in claims 1 and 25.

Additionally, the thin film resilient membrane of claims 1 and 25 cannot be considered to be disclosed by the upper portion 8 and the lower housing body 12 (which is made of a rigid material).

The plug member as set forth in claims 1 and 25 is retained in the resilient membrane between the intake port and the outlet port in the flow path.

Applicants respectfully submit that the plug member claimed in the present invention is always retained in the resilient membrane between the intake port and the outlet port which are formed by the resilient membrane, i.e., wherein both ports are formed by the resilient membrane, whereas a valve plug 2 disclosed in the invention of Gerber is retained by, but not in, an elastomeric tether 16, and is retained in a rigid lower housing body 12, i.e., a housing body made of a rigid material when it is at least in a state where the valve plug 2 is in a closed position and liquid from the outlet port is not discharged as shown in Gerber's Figure 1A, as shown in the

attached sheet 1. The lower housing body 12 is marked with diagonal lines in the sheet 1 attached to this document.

Accordingly, claims 1 and 25, as amended, are not disclosed in an anticipatory manner by Gerber and, therefore independent claims 1 and 25, as amended, are not properly rejectable under 35 U.S.C. § 102 (b).

New Claim 26

Claim 26 is added. Claim 26 depends from claim 1 and patentably defines over Gerber for at least that reason. Claim 26 additionally recites that the ball-shaped plug member is always retained by the resilient membrane between the intake port and the outlet port, which is clear from inspection of Applicants' disclosure, including, for example, Figs 1 and 2.

Consideration and allowance of claim 26 are respectfully requested.

Allowable Subject Matter

The Examiner states that claims 18-24 would be allowable if rewritten in independent form.

Applicants thank the Examiner for the early indication of allowable subject matter in this application.

Applicants have added the subject matter (1) of claim 12 to claim 18; (2) of claim 13 to claim 19; (3) of claim 14 to claim 20; (4) of claim 15 to claim 21; (5) of claim 16 to claims 22 and 23; and (6) of claim 17 to claim 24, so that claims 18-24 patentably define over the applied art.

Applicants note, in this regard, that claims 12-17 contain the subject matter of claims 1 and 10. Thus, claims 18-24 also contain the subject matter of claims 1 and 10.

Additionally, Applicants have presented reasons why claim 1 patentably defines over the applied art. Those reasons also apply to claims 18-24, which also recite the subject matter of claim 1.

Thus, claims 18-24 patentably define over the applied art.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

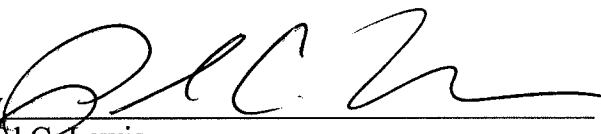
In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert J. Webster, Registration No. 46,472, at the telephone number of the undersigned below to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Director is hereby authorized in this, concurrent, and future replies to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

Dated: December 14, 2010

Respectfully submitted,

By 
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Attachment: Sheet 1 (showing Gerber's Figs. 1A, 1B and 1C with added legends)